

Patent Claims:

1. A biocompatible, low viscosity, radiation curable formulation, especially for stereo, for use in medicinal technology, especially for producing earpieces, comprising:

5 a) 55 to 95 weight percent of a monomeric or oligomeric dimethacrylate on the basis of bisphenol-A or bisphenol-F;

b) 0 to 20 weight percent of a urethane methacrylate with a viscosity > 4 and a viscosity < 15 Pa s;

10 c) 2 to 15 weight percent of a monomeric or aliphatic or cycloaliphatic dimethacrylate with a viscosity < 5 Pa s;

d) 0 to 15 weight percent of a monofunctional methacrylate with a viscosity < 3 Pa s;

15 e) 0.5 to 6 weight percent of one or a combination of photoinitiators whose absorption lies in the wavelength range of the laser beam used;

f) 0.001 to 2 weight percent of the inhibitor 2,2,6,6-tetramethylpiperdine-1-yloxy (free radical) which can be present in combination with known inhibitors;

g) 0 to 40 weight percent of fillers;

20 h) 0 to 5 weight percent of color pigments;

i) 0 to 5 weight percent of usual additives like UV stabilizers or flow additives, whereby the proportion of the components a to h together amounts to 100%.

2. The formulation according to claim 1 comprising:

5 a) 60 to 90 weight percent of an n-fold ethoxylated bisphenol-A-dimethacrylate with a degree of ethyloxilation of $n < 10$ or a mixture of n-fold ethoxylated bisphenol-A-dimethacrylate with a degree of $n < 10$;

10 b) 5 to 17 weight percent of an aliphatic or cycloaliphatic urethane methacrylate with sensitivity of $n < 4$ and a viscosity of $< 10 \text{ Pa s}$;

c) 3 to 10 weight percent of an aliphatic or cycloaliphatic urethane dimethacrylate with and a viscosity $< 3 \text{ Pa s}$;

15 d) 2 to 10 weight percent of a monofunctional methacrylate with a viscosity $< 3 \text{ Pa s}$;

e) 1 to 4 weight percent of one or a combination of a plurality of photoinitiators whose absorption is in the wavelength range of the laser beam used;

20 f) 0.005 to 0.05 weight percent of the initiator 2,2,6,6-tetramethylpiperdine-1-yloxy (free radical) optionally in

combination with known inhibitors;

g) 0.20 weight percent of fillers;

h) 0 to 5 weight percent of color pigments;

i) 0.01 to 3 weight percent of conventional additives

5 like UV stabilizers or flow additives whereby the proportion of the components of (a) to (h) amount together to 100%.